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April 14, 2016

Ms. Jennifer Sutter
Voluntary Cleanup and Portland Harbor Section
Oregon Department of Environmental Quality
700 NE Multnomah St.
Suite 600
Portland, OR 97232

**Subject: First Quarter 2016 Progress Report for EVRAZ Oregon Steel Facility in
Portland, Oregon WPMVC-NWR-00-10**

Dear Ms. Sutter:

On behalf of EVRAZ Oregon Steel (EOS), Integral Consulting submits to the Oregon Department of Environmental Quality (DEQ) this First Quarter 2016 Progress Report for the EOS facility in Portland, Oregon, located at 14400 N. Rivergate Blvd. This report is submitted in accordance with Section II.H of the June 2000 Voluntary Remediation Investigation Source Control Measure Agreement (Voluntary Agreement) for the EOS facility. This report documents and discusses the project activities from January 1 through March 31, 2016 (first quarter of 2016). In addition, this report describes activities planned for the second quarter of 2016.

Actions Completed During the First Quarter 2016

Stormwater Source Control

EOS collected a loading study composite stormwater sample on January 12-13, 2016. This is the second loading study sample following installation of the smaller workhorse pumps at each pump station, and the first loading study sample following stormwater basin cleanout in October 2015. The sampling is being completed to evaluate if additional stormwater treatment upgrades to the Northern Outfall (003) end-of-pipe treatment system are necessary under the Voluntary Agreement. Results from the January 12-13 composite sampling event are attached.

Sediment depths in the stormwater clarification basin cells were measured twice during the first quarter of 2016. Sediment thickness in the basin remains below the criteria set for cleanout.

Riverbank Source Control

EOS completed implementation of the riverbank source control measure during the first quarter of 2016. Planting on the final 20% of the berm, beach planting, spring hydroseeding, and project close out tasks were completed during the first quarter.

Groundwater Source Control

No groundwater work was completed by EOS during the first quarter of 2016.

Upland Remedial Action / Risk Assessment

A Human Health Risk Assessment (HHRA) Addendum was submitted to DEQ on April 4, 2016. The HHRA Addendum provided final revisions and response to DEQ comments on the HHRA.

Problems Experienced During the First Quarter 2016

No significant problems were encountered during the first quarter of 2016.

Actions Scheduled for the Second Quarter 2016

EOS is planning the following source control and upland closure-related activities for the second quarter of 2016:

Stormwater Source Control

- Monitor sediment depth accumulation in the stormwater clarification basin
- Meet with DEQ to discuss the January 12-13, 2016 composite sampling results
- Submit a data report January 12-13, 2016 composite sampling event and results.

Riverbank Source Control

- Prepare the Source Control Measure construction completion report
- Landscaping maintenance and watering in accordance with design and contract documents.

Groundwater Source Control

- No action planned for Q2-2016.

Upland Remedial Action/Risk Assessment/Feasibility Study

- Respond to any DEQ comments or questions on the HHRA Addendum

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- Pending DEQ concurrence on the HHRA Addendum, work will be initiated on a focused feasibility study.

If you have any questions regarding this report, please contact me at (503) 943-3629 or Linda Baker at (206) 957-0314.

Sincerely,



Craig Heimbucher, P.E.
Project Manager

cc: Drew Gilpin, Jay Griffith and Debbie Deetz Silva – EOS
Joan Snyder – Stoel Rives
Loren Dunn – Riddell Williams
Linda Baker – Integral Consulting
Eva DeMaria - EPA
File C1144-202

Enclosures

Table January 2016 Composite Sampling Event Analytical Results— All Chemistry Results

		Sample ID:		011216-OF003	
Chemical	Fraction	Units	Result	Qualifier ^a	
Metals					
Aluminum	D	µg/L	35.0		
Aluminum	T	µg/L	11300		
Antimony	D	µg/L	0.42		
Antimony	T	µg/L	0.81		
Arsenic	D	µg/L	1.32		
Arsenic	T	µg/L	3.62		
Cadmium	D	µg/L	0.032		
Cadmium	T	µg/L	0.731		
Chromium	D	µg/L	5.48		
Chromium	T	µg/L	143		
Copper	D	µg/L	2.47		
Copper	T	µg/L	61.4		
Lead	D	µg/L	0.044		
Lead	T	µg/L	25.6		
Manganese	D	µg/L	25.5		
Manganese	T	µg/L	1280		
Mercury	D	µg/L	0.200		U
Mercury	T	µg/L	0.030		J
Nickel	D	µg/L	1.53		
Nickel	T	µg/L	18.2		
Selenium	D	µg/L	1.00		U
Selenium	T	µg/L	2.50		U
Silver	D	µg/L	0.020		U
Silver	T	µg/L	0.147		
Zinc	D	µg/L	2.04		
Zinc	T	µg/L	254		
PCBs					
Total PCB ^b	NA	µg/L	0.155		J
Total PCB ^c	NA	µg/L	0.155		J
Polycyclic Aromatic Hydrocarbons					
2-Methylnaphthalene	NA	µg/L	0.030		
Acenaphthene	NA	µg/L	0.062		
Acenaphthylene	NA	µg/L	0.022		
Anthracene	NA	µg/L	0.078		
Benzo[a]anthracene	NA	µg/L	0.092		
Benzo[a]pyrene	NA	µg/L	0.061		
Benzo[b]fluoranthene	NA	µg/L	0.170		
Benzo[g,h,i]perylene	NA	µg/L	0.096		
Benzo[k]fluoranthene	NA	µg/L	0.046		
Chrysene	NA	µg/L	0.210		
Dibenzo[a,h]anthracene	NA	µg/L	0.017		J
Fluoranthene	NA	µg/L	0.350		
Fluorene	NA	µg/L	0.042		
Indeno[1,2,3-cd]pyrene	NA	µg/L	0.068		
Naphthalene	NA	µg/L	0.180		
Phenanthrene	NA	µg/L	0.160		
Pyrene	NA	µg/L	0.320		
Total detected PAHs	NA	µg/L	2.00		
Phthalate Esters					
Benzyl n-butyl phthalate	NA	µg/L	0.95		U
Bis(2-ethylhexyl)phthalate	NA	µg/L	4.80		U
Diethyl phthalate	NA	µg/L	0.27		U
Dimethyl phthalate	NA	µg/L	0.95		U
Di-n-butyl phthalate	NA	µg/L	0.95		U
Di-n-octylphthalate	NA	µg/L	0.95		U

Table January 2016 Composite Sampling Event Analytical Results— All Chemistry Results

		Sample ID:		011216-OF003	
Chemical	Fraction	Units	Result	Qualifier ^a	
Conventional Analyses					
Organic carbon	D	mg/L	1.71		
Organic carbon	T	mg/L	2.23		
Total Suspended Solids	T	mg/L	256		

Notes:

- D = dissolved
- MDL = method detection limit
- MRL = method reporting limit
- NA = not applicable
- PCB = polychlorinated biphenyl
- T = total

Qualifiers:

- J = estimated value between the MRL and the MDL
- U = not detected at or above the MRL/MDL

^a Integral validated data March 2016.

^b Total PCBs derived from the sum of detected PCB congeners plus one-half the MDL/MRL of non-detects (see Attachment D).

^c Total PCBs derived from the sum of detected PCB congeners, nondetect PCB congeners not included in sum.

Table January 2016 Composite Sampling Event Analytical Results— PCB Congener Results

		Sample ID:	011216-OF003	
Chemical	Congener Number	Units	Result	Qualifier ^a
PCB Congeners				
2-Chlorobiphenyl	PCB001	pg/L	1330	
3-Chlorobiphenyl	PCB002	pg/L	30.4	
4-Chlorobiphenyl	PCB003	pg/L	490	
2,2'-Dichlorobiphenyl	PCB004	pg/L	16900	
2,3-Dichlorobiphenyl	PCB005	pg/L	26.7	
2,3'-Dichlorobiphenyl	PCB006	pg/L	1740	
2,4-Dichlorobiphenyl	PCB007	pg/L	100	
2,4'-Dichlorobiphenyl	PCB008	pg/L	6680	
2,5-Dichlorobiphenyl	PCB009	pg/L	213	
2,6-Dichlorobiphenyl	PCB010	pg/L	306	
3,3'-Dichlorobiphenyl	PCB011	pg/L	405	
Coelution of PCB 012 and 013	PCB012+013	pg/L	146	
3,5-Dichlorobiphenyl	PCB014	pg/L	1.45	U
4,4'-Dichlorobiphenyl	PCB015	pg/L	1990	
2,2',3-Trichlorobiphenyl	PCB016	pg/L	758	
2,2',4-Trichlorobiphenyl	PCB017	pg/L	3320	
Coelution of PCB 018 and 030	PCB018+030	pg/L	2390	
2,2',6-Trichlorobiphenyl	PCB019	pg/L	3970	
Coelution of PCB 020 and 028	PCB020+028	pg/L	4140	
Coelution of PCB 021 and 033	PCB021+033	pg/L	830	
2,3,4'-Trichlorobiphenyl	PCB022	pg/L	1270	
2,3,5-Trichlorobiphenyl	PCB023	pg/L	7.04	U
2,3,6-Trichlorobiphenyl	PCB024	pg/L	37.8	
2,3',4-Trichlorobiphenyl	PCB025	pg/L	262	
Coelution of PCB 026 and 029	PCB026+029	pg/L	604	
2,3',6-Trichlorobiphenyl	PCB027	pg/L	890	
2,4',5-Trichlorobiphenyl	PCB031	pg/L	2680	
2,4',6-Trichlorobiphenyl	PCB032	pg/L	2800	
2,3',5'-Trichlorobiphenyl	PCB034	pg/L	15.2	J
3,3',4-Trichlorobiphenyl	PCB035	pg/L	51.6	
3,3',5-Trichlorobiphenyl	PCB036	pg/L	6.33	U
3,4,4'-Trichlorobiphenyl	PCB037	pg/L	1260	
3,4,5-Trichlorobiphenyl	PCB038	pg/L	6.88	U
3,4',5-Trichlorobiphenyl	PCB039	pg/L	29.2	
Coelution of PCB 040, 041, and 071	PCB040+041+071	pg/L	3460	
2,2',3,4'-Tetrachlorobiphenyl	PCB042	pg/L	1560	
2,2',3,5-Tetrachlorobiphenyl	PCB043	pg/L	245	
Coelution of PCB 044, 047, and 065	PCB044+047+065	pg/L	5830	
Coelution of PCB 045 and 051	PCB045+051	pg/L	1170	
2,2',3,6'-Tetrachlorobiphenyl	PCB046	pg/L	397	
2,2',4,5-Tetrachlorobiphenyl	PCB048	pg/L	878	
Coelution of PCB 049 and 069	PCB049+069	pg/L	3260	
Coelution of PCB 050 and 053	PCB050+053	pg/L	1140	
2,2',5,5'-Tetrachlorobiphenyl	PCB052	pg/L	6060	
2,2',6,6'-Tetrachlorobiphenyl	PCB054	pg/L	41.7	
2,3,3',4-Tetrachlorobiphenyl	PCB055	pg/L	77.2	
2,3,3',4'-Tetrachlorobiphenyl	PCB056	pg/L	2520	
2,3,3',5-Tetrachlorobiphenyl	PCB057	pg/L	18.6	J
2,3,3',5'-Tetrachlorobiphenyl	PCB058	pg/L	12.1	J
Coelution of PCB 059, 062, and 075	PCB059+062+075	pg/L	500	
2,3,4,4'-Tetrachlorobiphenyl	PCB060	pg/L	1300	
Coelution of PCB 061, 070, 074, and 076	PCB061+070+2m	pg/L	6910	
2,3,4',5-Tetrachlorobiphenyl	PCB063	pg/L	163	
2,3,4',6-Tetrachlorobiphenyl	PCB064	pg/L	2750	
2,3',4,4'-Tetrachlorobiphenyl	PCB066	pg/L	4520	
2,3',4,5-Tetrachlorobiphenyl	PCB067	pg/L	105	
2,3',4,5'-Tetrachlorobiphenyl	PCB068	pg/L	14.2	J
2,3',5,5'-Tetrachlorobiphenyl	PCB072	pg/L	27.4	
2,3',5',6-Tetrachlorobiphenyl	PCB073	pg/L	0.741	U
3,3',4,4'-Tetrachlorobiphenyl	PCB077	pg/L	575	
3,3',4,5-Tetrachlorobiphenyl	PCB078	pg/L	8.42	U
3,3',4,5'-Tetrachlorobiphenyl	PCB079	pg/L	63.6	
3,3',5,5'-Tetrachlorobiphenyl	PCB080	pg/L	7.41	U
3,4,4',5-Tetrachlorobiphenyl	PCB081	pg/L	24.9	U
2,2',3,3',4-Pentachlorobiphenyl	PCB082	pg/L	920	
Coelution of PCB 083 and 099	PCB083+099	pg/L	2890	
2,2',3,3',6-Pentachlorobiphenyl	PCB084	pg/L	1490	
Coelution of PCB 085, 116, and 117	PCB085+116+117	pg/L	1180	
Coelution of PCB 086, 087, 097, 108, 119, and 125	PCB086+087+4m	pg/L	4000	
Coelution of PCB 088 and 091	PCB088+091	pg/L	852	
2,2',3,4,6'-Pentachlorobiphenyl	PCB089	pg/L	122	
Coelution of PCB 090, 101, and 113	PCB090+101+113	pg/L	4320	
2,2',3,5,5'-Pentachlorobiphenyl	PCB092	pg/L	799	
Coelution of PCB 093, 095, 098, 100 and 102	PCB093+095+3pa	pg/L	3850	
2,2',3,5,6'-Pentachlorobiphenyl	PCB094	pg/L	39	

Table January 2016 Composite Sampling Event Analytical Results— PCB Congener Results

			Sample ID:	011216-OF003
Chemical	Congener Number	Units	Result	Qualifier ^a
2,2',3,6,6'-Pentachlorobiphenyl	PCB096	pg/L	58.1	
2,2',4,5',6-Pentachlorobiphenyl	PCB103	pg/L	24.9	
2,2',4,6,6'-Pentachlorobiphenyl	PCB104	pg/L	0.704	U
2,3,3',4,4'-Pentachlorobiphenyl	PCB105	pg/L	2470	
2,3,3',4,5-Pentachlorobiphenyl	PCB106	pg/L	12	U
Coelution of PCB 107 and 124	PCB107+124	pg/L	187	
2,3,3',4,6-Pentachlorobiphenyl	PCB109	pg/L	314	
Coelution of PCB 110 and 115	PCB110+115	pg/L	6110	
2,3,3',5,5'-Pentachlorobiphenyl	PCB111	pg/L	1.39	U
2,3,3',5,6-Pentachlorobiphenyl	PCB112	pg/L	1.25	U
2,3,4,4',5-Pentachlorobiphenyl	PCB114	pg/L	135	
2,3',4,4',5-Pentachlorobiphenyl	PCB118	pg/L	4570	
2,3',4,5,5'-Pentachlorobiphenyl	PCB120	pg/L	5.11	J
2,3',4,5',6-Pentachlorobiphenyl	PCB121	pg/L	1.28	U
2,3,3',4',5'-Pentachlorobiphenyl	PCB122	pg/L	91.9	
2,3',4,4',5'-Pentachlorobiphenyl	PCB123	pg/L	108	
3,3',4,4',5-Pentachlorobiphenyl	PCB126	pg/L	16.5	
3,3',4,5,5'-Pentachlorobiphenyl	PCB127	pg/L	12.3	U
Coelution of PCB 128 and 166	PCB128+166	pg/L	752	
Coelution of PCB 129, 138, 160, and 163	PCB129+138+2m	pg/L	3870	
2,2',3,3',4,5'-Hexachlorobiphenyl	PCB130	pg/L	253	
2,2',3,3',4,6-Hexachlorobiphenyl	PCB131	pg/L	57.2	
2,2',3,3',4,6'-Hexachlorobiphenyl	PCB132	pg/L	1340	
2,2',3,3',5,5'-Hexachlorobiphenyl	PCB133	pg/L	38.5	
Coelution of PCB 134 and 143	PCB134+143	pg/L	191	
Coelution of PCB 135, 151, and 154	PCB135+151+154	pg/L	812	
2,2',3,3',6,6'-Hexachlorobiphenyl	PCB136	pg/L	352	
2,2',3,4,4',5-Hexachlorobiphenyl	PCB137	pg/L	239	
Coelution of PCB 139 and 140	PCB139+140	pg/L	67.9	
2,2',3,4,5,5'-Hexachlorobiphenyl	PCB141	pg/L	652	
2,2',3,4,5,6-Hexachlorobiphenyl	PCB142	pg/L	7.6	U
2,2',3,4,5',6-Hexachlorobiphenyl	PCB144	pg/L	130	
2,2',3,4,6,6'-Hexachlorobiphenyl	PCB145	pg/L	1.57	J
2,2',3,4',5,5'-Hexachlorobiphenyl	PCB146	pg/L	460	
Coelution of PCB 147 and 149	PCB147+149	pg/L	2240	
2,2',3,4',5,6'-Hexachlorobiphenyl	PCB148	pg/L	2.27	J
2,2',3,4',6,6'-Hexachlorobiphenyl	PCB150	pg/L	3.37	J
2,2',3,5,6,6'-Hexachlorobiphenyl	PCB152	pg/L	4.32	J
Coelution of PCB 153 and 168	PCB153+168	pg/L	2330	
2,2',4,4',6,6'-Hexachlorobiphenyl	PCB155	pg/L	0.743	U
Coelution of PCB 156 and 157	PCB156+157	pg/L	560	
2,3,3',4,4',6-Hexachlorobiphenyl	PCB158	pg/L	411	
2,3,3',4,5,5'-Hexachlorobiphenyl	PCB159	pg/L	26.5	
2,3,3',4,5',6-Hexachlorobiphenyl	PCB161	pg/L	5.08	U
2,3,3',4',5,5'-Hexachlorobiphenyl	PCB162	pg/L	14.2	J
2,3,3',4',5',6-Hexachlorobiphenyl	PCB164	pg/L	253	
2,3,3',5,5',6-Hexachlorobiphenyl	PCB165	pg/L	6.11	U
2,3',4,4',5,5'-Hexachlorobiphenyl	PCB167	pg/L	184	
3,3',4,4',5,5'-Hexachlorobiphenyl	PCB169	pg/L	5.88	U
2,2',3,3',4,4',5-Heptachlorobiphenyl	PCB170	pg/L	572	
Coelution of PCB 171 and 173	PCB171+173	pg/L	197	
2,2',3,3',4,5,5'-Heptachlorobiphenyl	PCB172	pg/L	103	
2,2',3,3',4,5,6'-Heptachlorobiphenyl	PCB174	pg/L	550	
2,2',3,3',4,5',6-Heptachlorobiphenyl	PCB175	pg/L	24.1	
2,2',3,3',4,6,6'-Heptachlorobiphenyl	PCB176	pg/L	60.8	
2,2',3,3',4,5',6'-Heptachlorobiphenyl	PCB177	pg/L	313	
2,2',3,3',5,5',6-Heptachlorobiphenyl	PCB178	pg/L	97.2	
2,2',3,3',5,6,6'-Heptachlorobiphenyl	PCB179	pg/L	188	
Coelution of PCB 180 and 193	PCB180+193	pg/L	1150	
2,2',3,4,4',5,6-Heptachlorobiphenyl	PCB181	pg/L	10.3	J
2,2',3,4,4',5,6'-Heptachlorobiphenyl	PCB182	pg/L	4.2	J
Coelution of PCB 183 and 185	PCB183+185	pg/L	387	
2,2',3,4,4',6,6'-Heptachlorobiphenyl	PCB184	pg/L	0.986	U
2,2',3,4,5,6,6'-Heptachlorobiphenyl	PCB186	pg/L	1.08	U
2,2',3,4',5,5',6-Heptachlorobiphenyl	PCB187	pg/L	675	
2,2',3,4',5,6,6'-Heptachlorobiphenyl	PCB188	pg/L	1.56	J
2,3,3',4,4',5,5'-Heptachlorobiphenyl	PCB189	pg/L	26.6	
2,3,3',4,4',5,6-Heptachlorobiphenyl	PCB190	pg/L	121	
2,3,3',4,4',5',6-Heptachlorobiphenyl	PCB191	pg/L	26.1	
2,3,3',4,5,5',6-Heptachlorobiphenyl	PCB192	pg/L	1.18	U
2,2',3,3',4,4',5,5'-Octachlorobiphenyl	PCB194	pg/L	281	
2,2',3,3',4,4',5,6-Octachlorobiphenyl	PCB195	pg/L	97.6	
2,2',3,3',4,4',5,6'-Octachlorobiphenyl	PCB196	pg/L	153	
Coelution of PCB 197 and 200	PCB197+200	pg/L	47.5	J
Coelution of PCB 198 and 199	PCB198+199	pg/L	376	
2,2',3,3',4,5',6,6'-Octachlorobiphenyl	PCB201	pg/L	40.7	

Table January 2016 Composite Sampling Event Analytical Results— PCB Congener Results

			Sample ID:	011216-OF003
Chemical	Congener Number	Units	Result	Qualifier ^a
2,2',3,3',5,5',6,6'-Octachlorobiphenyl	PCB202	pg/L	78.9	
2,2',3,4,4',5,5',6-Octachlorobiphenyl	PCB203	pg/L	235	
2,2',3,4,4',5,6,6'-Octachlorobiphenyl	PCB204	pg/L	0.969	U
2,3,3',4,4',5,5',6-Octachlorobiphenyl	PCB205	pg/L	13.8	J
2,2',3,3',4,4',5,5',6-Nonachlorobiphenyl	PCB206	pg/L	229	
2,2',3,3',4,4',5,6,6'-Nonachlorobiphenyl	PCB207	pg/L	26.2	
2,2',3,3',4,5,5',6,6'-Nonachlorobiphenyl	PCB208	pg/L	68.6	
2,2',3,3',4,4',5,5',6,6'-Decachlorobiphenyl	PCB209	pg/L	98.5	

Notes:

- MDL = method detection limit
- MRL = method reporting limit
- NA = not applicable
- PCB = polychlorinated biphenyl

Qualifiers:

- J = estimated value between the MRL and the MDL
- U = not detected at or above the MRL/MDL

^a Integral validated data March 2016.